

AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions and listings of claims in the application:

Listing of Claims:

1. **(Currently Amended)** An optical coupler comprising:
a spherical lens; and
an aspherical lens configured to directly contact an optical fiber; and
wherein said lenses and said optical fiber are situated on a common optical axis in
~~the same optical path.~~
2. **(Original)** The coupler of claim 1, wherein:
said spherical lens comprises a glass material; and
said aspherical lens comprises a non-glass material.
3. **(Original)** The coupler of claim 2, wherein said spherical lens is a ball lens.
4. **(Original)** The coupler of claim 3, wherein said aspherical lens comprises a
plastic material.
5. **(Original)** The coupler of claim 4, wherein said aspherical lens is
approximately concave.
6. **(Original)** The coupler of claim 4, wherein said aspherical lens is
approximately convex.
7. **(Original)** The coupler of claim 5, wherein said aspherical lens is a molded
plastic lens.

8. **(Original)** The coupler of claim 6, wherein said aspherical lens is a molded plastic lens.
9. **(Original)** The coupler of claim 7, wherein said aspherical lens is injection molded.
10. **(Original)** The coupler of claim 8, wherein said aspherical lens is injection molded.
11. **(Original)** The coupler of claim 3, wherein:
 a light source is situated proximate to said spherical lens; and
 an optical medium is situated proximate to said aspherical lens;
12. **(Original)** The coupler of claim 11, wherein light from the light source may propagate through said spherical lens and said aspherical lens, respectively.
13. **(Original)** The coupler of claim 12, further comprising a window situated between the light source and said spherical lens.
14. **(Original)** The coupler of claim 13, wherein the optical medium is an optical fiber.
15. **(Original)** The coupler of claim 14, wherein the light source is a vertical cavity surface emitting laser.
16. **(Original)** The coupler of claim 15, wherein the optical fiber is single mode.

17. **(Previously Presented)** An optical coupling system comprising:
a spherical ball lens comprising a glass material; and
an aspherical lens comprising a plastic material; and
wherein said spherical ball lens and said aspherical lens are situated on a common
optical axis.
18. **(Original)** The system of claim 17, wherein said aspherical lens is coupled to
an optical fiber.

19. **(Canceled)**

20. **(Canceled)**

21. **(Currently Amended)** A coupling means comprising:
means for spherically focusing light from a light source;
means for aspherically focusing light from said means for spherically focusing light; and
an optical medium configured to guide the aspherically focused light from said means for aspherically focusing light, the optical medium contacting the means for aspherically focusing light, wherein the means for spherically focusing light, the means for aspherically focusing light and the optical medium are situated on a common optical axis.
22. **(Original)** The coupling means of claim 21, wherein:
the light source is a laser; and
the optical medium is a fiber.
23. **(Original)** The coupling means of claim 22, wherein:
the laser is a vertical cavity surface emitting laser; and
the fiber is a single mode optical fiber.
24. **(Original)** The coupling means of claim 23, wherein said means for spherically focusing light conveys more light power than said means for aspherically focusing light.
25. **(Previously Presented)** The coupling means of claim 24, wherein:
said means for spherically focusing light uses material including glass for focusing light; and
said means for aspherically focusing light uses material including plastic for focusing light.

26. **(Previously Presented)** A method for coupling light, comprising:
spherically focusing light from a light source resulting in a first portion of light having a first focal point on an optical axis and a second portion of light having a second focal point on the optical axis; and
aspherically focusing the first portion of light and the second portion of light resulting in the first and second portions of light having a common focal point at a point of contact between an aspherical lens and an optical medium.
27. **(Original)** The method of claim 26, wherein:
spherically focusing the light from the light source is effected by a ball lens; and
aspherically focusing the first and second portions of light from the ball lens is effected by an aspherically-shaped lens.
28. **(Original)** The method of claim 27, wherein the common focal point is at a place of an optical medium.
29. **(Previously Presented)** The method of claim 28, wherein:
the ball lens comprises a glass material; and
the aspherically-shaped lens comprises a plastic material.
30. **(Original)** The method of claim 29, wherein:
the light source is a laser; and
the optical medium is an optical fiber.
31. **(Original)** The method of claim 30, wherein:
the laser is a vertical cavity surface emitting light source; and
the optical fiber is a single mode fiber.

32. **(Currently Amended)** An optical coupler comprising:
an concave aspherical lens on an optical axis; and
a spherical lens on ~~[[an]]~~ the same optical axis; and
wherein:
said concave aspherical lens ~~[[is]]~~ immediately precedes or follows an
optoelectronic element; and
said spherical lens immediately precedes or follows an optical medium.
33. **(Previously Presented)** The coupler of claim 32, wherein:
said aspherical lens comprises a plastic material; and
said spherical lens comprises a glass material.
34. **(Original)** The coupler of claim 33, wherein said spherical lens is a ball lens.
35. **(Original)** The coupler of claim 34, wherein:
said optoelectronic element is a light source; and
said optical medium is an optical fiber.
36. **(Original)** The coupler of claim 35, wherein the light source is a laser.
37. **(Original)** The coupler of claim 36, wherein:
the laser is a vertical cavity surface emitting laser; and
the optical fiber is single mode fiber.
38. **(Original)** The coupler of claim 34, wherein:
the optoelectronic element is a detector; and
said optical medium is an optical fiber.
39. **(Original)** The coupler of claim 38, wherein said optical fiber is single mode
fiber.

40. **(Original)** The coupler of claim 38, wherein said optical fiber is multimode fiber.

41. **(Previously Presented)** The coupler of claim 5, wherein the aspherical lens includes a first side that is approximately concave and configured to receive an optical signal and a second side that substantially flat.

42. **(Previously Presented)** The coupler of claim 1, wherein the aspherical lens includes a substantially flat portion that is configured to directly contact the optical fiber.